

MGT 298E-1: Venture Capital Strategy

Prof. Olav Sorenson - Winter 2021

Location: Zoom; Time: Mondays 1pm-2:30pm

Course overview

Venture capital plays a critical role in the founding and development of new enterprises, and in stimulating the growth of economies. Over the past 40 years, there has been an enormous surge in the financial resources allocated to venture capital. According to the National Venture Capital Association (NVCA), the pool of funds dedicated to investing in startups has grown from roughly \$1.8 billion in 1980 (in 2020 dollars) to more than \$136 billion in 2019, just below the record levels of 2018.

In this course, we will review all aspects of starting and operating a venture capital firm. At the end of the course, your ability to answer the following questions should have improved:

- How can I attract investors into a fund?
- How can I best select among potential equity investments?
- How can I best invest in early-stage and high-growth companies?
- How can I best manage a portfolio of venture investments?
- As an investor, how can I choose among different 'exit' options?

To address these questions, we will draw on recent advances in competitive strategy, organization theory, financial economics, and economic sociology. Though built on rigorous theory and evidence, the focus of the course is nonetheless highly practical. Please note that, while I teach the course from the perspective of the investor, the venture capitalist, potential private equity partners, potential entrepreneurs, potential investors in funds (i.e. limited partners), and potential policymakers should also find useful a better understanding of the industry.

I have one main goal for the course: I wish to give you a nuanced view of the structure of the venture capital industry and the relationships between venture capitalists and both limited partners and the firms in which they invest. By doing so, I hope to prepare you: (i) to manage venture capital funds, (ii) to raise capital for entrepreneurial ventures, and (iii) to choose among private equity investments. **Management 235:** Although the course has been designed to serve as a stand-along introduction to venture capital, for those interested in developing a deeper understanding of the industry, this course can also serve as a complement to *Management 235: Venture Capital and Private Equity.* While this course focuses on the strategic decisions involved in managing a fund, that course focuses more on the financial analysis and valuation of the broad spectrum of private equity investments. Those interested in both courses should feel free to sequence them as best fits their schedules.

Assessment

I will evaluate your performance in the course on four components: class discussion, two individual write-ups, one problem set, and one group assignment. I will weight them as follows in determining the final grade.

Component	Weight
Class participation	20%
Individual write-ups	30%
Problem set	30%
Group assignment	20%

Class participation: Through effective class discussion, we will all learn more about the industry and its operations. You add value when you (i) listen to others, (ii) *constructively* critique others' arguments, (iii) ask questions or pose positions that improve our understanding of the materials, (iv) describe and connect related personal experiences to the discussion, and (v) integrate ideas from other courses.

Problem set: All students must complete the problem set on understanding financial instruments, which I will distribute on February 1. You should submit your answers by the beginning of class on **February 8**.

Write-ups: Each student must complete **two** of the (four) case write-up options. Write-ups ask you to focus on a piece of analysis associated with one of the cases (see **writeup option** in bold among the study questions below). Your write-up should consist of no more than two pages explaining your conclusion and how you arrived at it. To receive credit, you must submit your write-up before the class in which I plan to discuss the case that your write-up considers.

Group assignments: For **February 19**, each group will need to prepare a position sheet and negotiate out terms with another group. A more detailed description of this assignment appears in the daily schedules below.

Instructor

You can reach me by e-mail at olav.sorenson@anderson.ucla.edu. If you wish to schedule office hours or meet with me outside of class, you can find my calendar at https://olavsorenson.youcanbook.me. It will show my availability each week and allow you to book a time slot.

Schedule

- 1. Course introduction (January 4).
 - Reading: Sahlman, William (1990), "The structure and governance of venturecapital organizations." *Journal of Financial Economics*, 27: 473-521
 - Case: Elizabeth Franco: Beginning the Journey

Study questions:

- (a) At which job would Elizabeth earn the most?
- (b) Which option would you advise Elizabeth to choose? Why?
- 2. RAISING A FIRST FUND (JANUARY 11).
 - Reading: Bentsson, Ola, and David H. Hsu (2015), "Ethnic matching in the U.S. venture-capital market." *Journal of Business Venturing*, 30: 338-354
 - Case: Harlem Capital: Changing the Face of Entrepreneurship (A)

Study questions:

- (a) Does Harlem Capital's proposed investment strategy seem attractive to potential limited partners? Why or why not?
- (b) **WRITEUP OPTION:** How successful have Tingle and Pierre-Jacques been as investors?
- (c) Why have Tingle and Pierre-Jacques been struggling to raise money?
- (d) Should they commit fully to Harlem Capital?

- 3. Accessing deal flow (January 22).
 - Reading: Nanda, Ramana, Sampsa Samila, and Olav Sorenson (2020), "The persistent effect of initial success: Evidence from venture capital." *Journal of Financial Economics*, 137: 231-248
 - Case: Pear VC

- (a) How does VC investing differ from angel investing?
- (b) How would you describe Pear's investment thesis?
- (c) How does Pear distinguish itself from hundreds of other Silicon Valley VC firms?
- 4. Selecting investments (January 25).
 - Reading: Gompers, Paul, Will Gornall, Steven N. Kaplan, and Ilya Stebulaev (2019), "How do venture capitalists make decisions?" *Journal of Financial Economics*, 137: 169-190
 - Case: PunchTab, Inc.
 - Case: PunchTab, Inc. Investor Presentation Deck

Study questions:

- (a) Did you find the pitch deck compelling?
- (b) Does PunchTab seem like an attractive investment? Why or why not?
- (c) Should Katherine Barr offer PunchTab a term sheet?
- (d) **WRITEUP OPTION:** If Barr offers to invest, how much should she invest? Why?
- 5. STRUCTURING INVESTMENTS (FEBRUARY 1).
 - Reading: Sorenson, Olav (2021), "Session 5 Lecture Notes"
 - Practice: Sorenson, Olav (2021), "Practice problems"

- 6. MANAGING PORTFOLIO COMPANIES (FEBRUARY 8).
 - PROBLEM SET: Problem Set Due (To be distributed: February 1)
 - Reading: Strebulaev, Ilya, Theresia Gouw Ranzetta, and David Hoyt (2014), "A Day in the Life of a Venture Capitalist." Stanford GSB Case E-444
 - Case: VCPE Strategy Vignettes: 2012 We will not have time to discuss all of the vignettes here, so please focus on two of them: Teapot Technology and Lerner Networks.

- (a) Should Smith recommend participating or passing on the E round for Teapot Technology? Why?
- (b) Why does the Series E have such a complicated structure?
- (c) How should Lerner Networks split the equity among the founders?
- (d) What factors should influence compensation?
- 7. NEGOTIATING DEAL TERMS (FEBRUARY 19).
 - Reading: Kawasaki, Guy (2006), "The top ten lies of entrepreneurs." https://guykawasaki.com/the_top_ten_lie_1-3/
 - Reading: Kawasaki, Guy (2006), "The top ten lies of venture capitalists." https://guykawasaki.com/the_top_ten_lie-3/
 - Case: Rebel Technologies Series Seed Negotiations

• GROUP ASSIGNMENT: Term sheets

Each team will play the role either of Emporer Ventures or of the management of Rebel. I will provide additional information to teams (distributed on February 8). You should use that information to determine your BATNA. I will also pair teams to engage in a negotiation, with one side playing the role of the investors and the other the role of the entrepreneurs in a negotiation. You should come to a deal (or agree that you cannot find common ground) and hand in your assignment sheets by 9pm on **February 18**. Class time will focus on debriefing the issues and the negotiations.

- 8. Follow-on investing (February 22).
 - Case: Fast Ion Battery

- (a) **WRITEUP OPTION:** Calculate the implied probabilities of success at each stage using the projected cap table (Figure 2):
 - i. Use a decision tree to map the capitalization table to potential outcomes for Fast Ion Battery. Assume the startup gets the projected pre-money valuation and investment amounts if it continues to raise capital and zero if it fails. What are the implied probabilities that it will achieve each round of funding?
 - ii. BONUS: Use these probabilities to generate the expected value of two decision trees: one where the investors put in \$5 million at the first stage and \$25 million if the Bridge Round is successful, and a second where they put in the full \$30 million in an all-or-nothing bet. In each case, use \$175 million as the value if successful (pre-money of Series C) and assume a value of zero if it fails.
- (b) What factors should John Davidson consider in deciding whether or not to pitch his partnership on continuing to fund Fast Ion Battery?
- (c) If they decide to do the Bridge round, should they implement the payto-play clause?
- 9. Investing through debt (March 1).
 - Case: Avid Radiopharmaceuticals and Lighthouse Capital Partners Study questions:
 - (a) As one of Barnes' colleagues, why might you oppose lending to Avid?
 - (b) How do the proposed terms mitigate the risks inherent in lending to companies with few assets and negative cash flow?
 - (c) What sorts of conflicts might arise among management and the various investors? How would you mitigate them?
 - (d) Should Skovrosky take the venture debt? Why or why not?

- 10. EXITING INVESTMENTS (MARCH 8).
 - Reading: Loughran, Tim, and Jay Ritter (2004), "Why has IPO underpricing changed over time?" *Finanacial Management*, 33: 5-37
 - Case: Square, Inc. IPO

- (a) Is now the right time for Square to go public?
- (b) Should Square pursue an acquisition instead?
- (c) Why did Square's stock price go up so much on the first day?
- (d) **WRITEUP OPTION:** Create a waterfall analysis for Square. Who wins and who loses in the IPO?

Materials

- 1. Sahlman, William A. (1990), "The structure and governance of venture-capital organizations." Journal of Financial Economics, 27: 473-521
- 2. Elizabeth Franco: Beginning the Journey, Yale SOM Case
- 3. Bentsson, Ola, and David H. Hsu (2015), "Ethnic matching in the U.S. venturecapital market." *Journal of Business Venturing*, 30: 338-354
- 4. Harlem Capital: Changing the Face of Entrepreneurship (A), HBS Case 9-120-040
- Nanda, Ramana, Sampsa Samila, and Olav Sorenson (2020), "The persistent effect of initial success: Evidence from venture capital." *Journal of Financial Economics*, 137: 231-248
- 6. Pear VC, Stanford GSB Case E-630
- Gompers, Paul, Will Gornall, Steven N. Kaplan, and Ilya Stebulaev (2020), "How do venture capitalists make decisions?" Journal of Financial Economics, 137: 169-190
- 8. PunchTab, Inc., HBS Case 9-812-033
- 9. PunchTab, Inc. Investor Presentation Deck, HBS Case 9-812-172
- 10. Sorenson, Olav (2021), "Session 5 Lecture Notes"
- 11. Sorenson, Olav (2021), "Practice Problems"
- 12. A Day in the Life of a Venture Capitalist, Stanford GSB Case E-444
- 13. VCPE Strategy Vignettes: 2012, HBS Case 9-812-073

- 14. Rebel Technologies Series Seed Negotiations
- 15. Fast Ion Battery, HBS Case 9-815-025
- 16. Avid Radiopharmaceuticals and Lighthouse Capital Partners, HBS Case 9-810-054
- 17. Loughran, Tim, and Jay Ritter (2004), "Why has IPO underpricing changed over time?" *Finanacial Management*, 33: 5-37
- 18. Square, Inc. IPO, HBS Case 9-817-054